# The earliest motion picture footage of the last captive thylacine?

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# **ABSTRACT**

David Fleay's 1933 motion film footage of the last captive thylacine at the Beaumaris Zoo in Hobart was thought to be the only film record of this thylacine. The authors provide evidence to confirm that two earlier motion picture films, erroneously dated to 1928, also show the last captive specimen at the zoo.

Key Words: Thylacine, Thylacinus cynocephalus, motion picture, Beaumaris Zoo, David Fleay.

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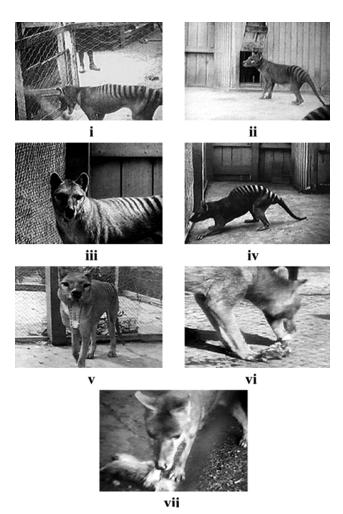
#### Introduction

The thylacine or Tasmanian tiger (*Thylacinus cynocephalus*) is the largest marsupial carnivore to have existed into modern times. The last known captive specimen, a male (Sleightholme, 2011), died at the Beaumaris Zoo on the Queen's Domain in Hobart on the night of the 7th September 1936. There are seven historical motion picture films known to exist of captive thylacines, all of which were made between 1911 and 1933 (Fig. 1, [i-vii]) 1. Five of the films were recorded at the Beaumaris Zoo in Hobart, and the remaining two at the London Zoo, Regent's Park. The earliest known footage was filmed by a Mr. Williamson at the old Beaumaris Zoo site in Sandy Bay, Hobart, on the 27th September 1911 (Fig. 1, [i]). The remaining four Tasmanian films were recorded at the Beaumaris Zoo at its new site on the Domain (Fig. 1, [ii - v]).

### The Domain Films

The earliest of the Domain<sup>2</sup> films (duration 10s) (Fig. 1, [ii]) is believed to have been taken in January 1928, and is the only film that shows a group of thylacines interacting with each other. The quality of the first few seconds of the film is poor, but improves as the film continues. The film opens with a scene of a hat being wafted by the zoo's superintendent, Arthur Reid, to coax the thylacines

<sup>2</sup> The Beaumaris Zoo moved from its Sandy Bay site to the Domain in 1923 following the death of its owner Mrs Mary Roberts, and was administered by the Hobart City Council until closure in 1937.



**Figure 1.** Historical thylacine motion picture films (i - vii).

I http://www.naturalworlds.org/thylacine/captivity/films/films.htm

into action for the camera. It proceeds to show a keeper in the enclosure wielding his trusty broom, presumably to prevent any untoward advances by his charges. The distended but empty pouch of an adult female within the group can clearly be seen. This female arrived at the zoo in January 1928 with two semi-independent young. Unfortunately, all died from an unspecified disease shortly after the film was made. The film concludes with the thylacines entering their night enclosure.

The cinematographer for films iii and iv is unknown, but the constancy of debris (small sticks and stones) on the floor of the enclosure indicates that both films were probably made (as two separate reels) on the same day. Film iii (duration 51s) opens with a thylacine standing in profile beside the entrance gate to its enclosure, sniffing the air. Midway, there is a brief glimpse of Arthur Reid on the outside of the enclosure fence. The film concludes with the thylacine resting. Film iv is the longest in duration (54s) of the seven surviving films. It shows the thylacine interacting with Arthur Reid and a small terrier dog on the opposite side of the enclosure fence. At one point in the film, the thylacine rears up on its hind legs, exhibiting a kangaroo-like stance. Throughout the film the thylacine appears to move swiftly and to be extremely responsive to the hand movements of Reid and the actions of the dog. These two films were believed to have been taken in 1928, several months after film ii.

Arguably, the most iconic of the thylacine films is that by the zoologist and naturalist David Fleay of the last captive thylacine (Fig. 1, [v]). The film (duration 45s) was taken on the 19th December 1933, some months after the thylacine was captured by Elias Churchill in the Florentine Valley. This thylacine is often referred to as "Benjamin" in the literature, and is shown pacing around its enclosure and at rest. Fleay's film was presumed to be the only known footage of the last captive thylacine, but the evidence presented in this paper disproves this assumption.

#### **Anatomical Considerations**

The coat of the thylacine is short, coarse, dense, and grey brown in colour, with between 13 and 22 darker stripes, commencing from just behind the shoulder blades and terminating at the base of the tail. As with human fingerprints, the stripe pattern of the thylacine is unique to each individual, with a marked degree of variation and asymmetry. The striping can be compressed or spaced, broad or narrow, fragmented or complete. There are often single or multiple connections with surrounding stripes, and occasionally, breaks within each individual stripe. The fourth and fifth stripes anterior to the base of the tail are the longest, and exhibit the greatest degree of terminal bifurcation. A thylacine photographed or filmed from one side of the body can rarely be identified by the stripe pattern on its opposite side (Fig. 2). The single congruency in the stripe pattern between thylacines is the spacing interval between the stripes along the midline of the spine (Sleightholme & Ayliffe, 2011). Two unrelated skins can be placed side-by-side and the spacing interval between the stripes is the same (Fig. 3).

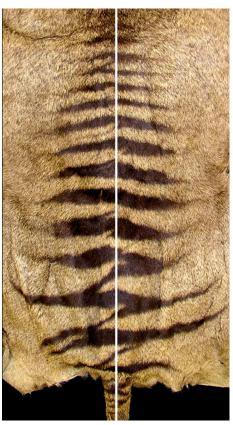
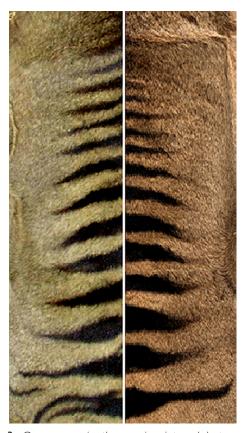


Figure 2. Thylacine skin showing asymmetry in the stripe pattern between the right and left sides. Courtesy: World Museum Liverpool [specimen 26.9.1910]. Photo: N. Ayliffe [ITSD].



**Figure 3.** Congruency in the spacing interval between the stripes of unrelated thylacine skins. Photos: ITSD 4th revision 2011. Skins (a) BMNH 1938.3.10.2 and (b) USNM 154462.

## **Anatomical Comparison**

The thylacine in films iii and iv, undeniably the same individual, has a number of identifying marks worthy of mention (Fig. 4, [i]). Firstly, it is a male with a noticeable penile mound under the tail. A snare mark is clearly evident above the right foot (Fig. 5, [viii]). With respect to a left-side comparison, at the terminal end of the third stripe, as measured from the base of the tail, there are two distinct under-stripes of near equal length (Fig. 5, [vi]). There is also a distinctive, somewhat detached upper tail stripe, with a narrow, distally placed under-stripe (Fig. 5, [iv]). These identifiers are unique to this thylacine, and would not be found in another individual.

If we now examine the thylacine shown in the Fleay film (Fig. 4, [ii]), the same unique identifying marks can clearly be seen (Fig. 5, [iii, v, vii]). In addition, the head shape of

the thylacine in films iii and iv (Fig. 5, [ii]) and that in the Fleay film (Fig. 5, [i]) are identical, as are the total number of body stripes; 16 for both thylacines.

# The Last Captive Thylacine

It is worth examining the historical evidence in support of the 1933 capture of Beaumaris Zoo's last thylacine. According to the statement of stock accounts of Arthur Reid, two thylacines were in the collection as of the 31st October 1929, and one at the commencement of 1930<sup>3</sup>. With respect to the thylacine that died, Reid records the death, apparently from kidney disease, as occurring on the 1st November 1929, and notes that the body was sold to the Tasmanian Museum for the sum of five pounds.

3 Reserves Committee (1924-1937). Minute Books, Hobart City Council, Archives Office of Tasmania.

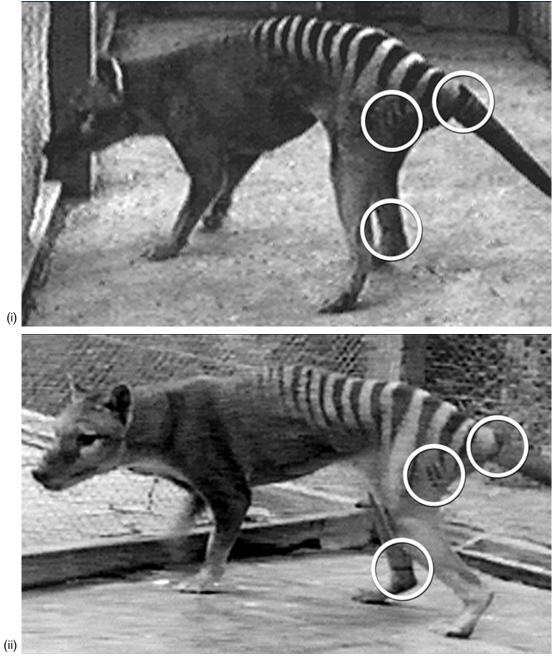
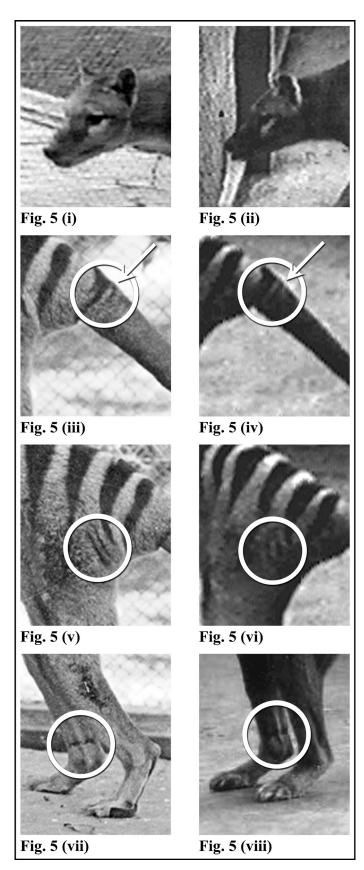


Figure 4. Congruity of identifying marks in photographic stills from film iv (i) and film v (ii).



**Figure 5.** Congruity of anatomical features: head (i) and (ii), tail stripe (iii) and (iv), double stripe on flank (v) and (vi), and snare mark (vii) and (viii), from films iv and v, or from photographic stills taken on the days of filming.

The remaining thylacine present in the zoo's collection at the beginning of 1930 must have died at some point during January or early February of that year, as Clive E. Lord, the director of the Tasmanian Museum and Art Gallery, notes in an article published in the Mercury newspaper of the 12th February 1930 that there were no thylacines in the Beaumaris Zoo:

"Mr. Clive Lord moved that the native tiger should be made a partly protected animal for a short season of each year. The motion Mr. Lord explained, was purposed to serve as a check on the export of the unique animal. The species was very rare, even in Tasmania, the only country in which it survived. There was no specimen in the Beaumaris Zoo and the Museum authorities had not received a specimen for over four years".

Therefore, no thylacines that were on display at the Beaumaris Zoo prior to the 12th February 1930 survived beyond this date.

It is now generally agreed by most authors (Sharland<sup>4</sup>, Paddle, Moeller<sup>5</sup> and Bailey<sup>6</sup>) that the Beaumaris Zoo acquired its last thylacine between June and July of 1933 from Elias Churchill (a timber cutter and trapper), the animal having been snared in the Florentine Valley. Paddle (2000, p. 191) provides several contemporary eyewitness accounts (Chaplin, Stanfield, Gossage) to support Churchill's claim. Unfortunately, the minutes of the Hobart City Council Reserves Committee for the period 21st June 1932 to 22nd May 1934 that could have confirmed the Churchill purchase have not been preserved. In a newspaper article<sup>7</sup> entitled: "Memories of a Tasmanian Tiger", David Fleay made the following comment:

"Not long captured and still wearing the springer snare brand about his right hand leg this long, lean, softly padding animal had an ethereal appearance".

Fleay's use of the words "not long captured" validates 1933 as the year the zoo acquired its last thylacine. His observation relating to the snare mark on the right leg is also worthy of note.

# The Whitley Paradox

Historically, the 1928 date for films iii and iv appears to have originated from a comment made by the eminent ichthyologist Gilbert P. Whitley<sup>8</sup> in an article entitled: "I remember the thylacine", published in the journal Koolewong in 1973. In that article, Whitley describes the two occasions on which he saw a living thylacine. The first was at the Taronga Zoo in Sydney in 1922, and the second was at the Beaumaris Zoo in Hobart in 1928:

<sup>4</sup> Sharland, M.S.R. [letter dated 17th December 1972] Thylacine Papers - Queen Victoria Museum & Art Gallery.

<sup>5</sup> Moeller, H. [letter dated 11th November 2007]. Although Moeller credits Churchill with the capture of the last captive thylacine, he also stated that further research was required to confirm this.

<sup>6</sup> Bailey, Interview with Churchill, 1969.

<sup>7</sup> The Courier Mail, 24th January 1984.

<sup>8</sup> Gilbert P. Whitley (1903-1975) - Curator of fishes at the Australian Museum and former president of the Royal Zoological Society of NSW and the Linnean Society of NSW.

"In 1928 I saw another live thylacine in the Hobart Zoo and bought a postcard showing this marsupial contrasted with a placental dog, with which it has of course no relationship and only a very superficial resemblance".

Whitley visited Hobart in January 1928 as a delegate to the 19th Congress of the Australasian Association for the Advancement of Science, as his name appears on the list of New South Wales members<sup>9</sup>. As part of this trip, he undoubtedly paid a visit to the Beaumaris Zoo to see the thylacine. He returned to Melbourne aboard the Nairana on the 1st February 1928<sup>10</sup>.



Figure 6. Postcard of "Tasmanian Marsupial Wolf", Hobart Zoo, c. 1928. Courtesy: G. P. Whitley Papers, Australian Museum Archives. (Ref. AMS 139/4/20/1)

The photograph Whitley used to illustrate the Koolewong article, a cropped rendition of his postcard (Fig. 6), was taken at the same time as films iii and iv. Several copies of the two films exist, with discrepancies over dating ranging from the late 1920s to the early 1930s, depending on the archive consulted<sup>11</sup>. The reversed photographic negative for the Koolewong article, now in the collection of the National Archives of Australia<sup>12</sup>, is dated 1933. Therefore, a considerable element of disagreement exists relating to the precise dating of the films and the photograph that was taken at the same time.

Whitley's postcard survives in the archive collection of the Australian Museum in Sydney (Fig. 6). The image is overwritten with the text: "TAS MRCPL WOLF HOBART ZOO". The reverse of the postcard bears an extremely faint imprint of what one would normally expect to see on the pictorial reverse of a standard postcard, together with the date: "c. 1928", and Whitley's name penned in ink. If, as Whitley implies, this was the actual postcard he purchased in 1928, then we have a quandary, as the thylacine portrayed was not yet in residence at the zoo.

#### Discussion

What possible explanations are there to unravel the Whitley paradox?

Did Whitley revisit the Beaumaris Zoo between 1933 and 1936 and purchase his postcard then, possibly confusing the dates of his visits with the passage of time? Whitley specifically states that he saw a living thylacine on only two occasions. As such, a return visit to Beaumaris post-1928 seems unlikely, and it is reasonable to assume that he would have mentioned this in his article. In addition, no records could be located in a search of Tasmanian newspapers for any visit by Whitley post-1928, and normally, a visit by a scientist of his stature would have warranted mention. So, we must therefore assume, in the absence of further evidence, that this did not take place.

Do other dating errors exist in Whitley's account? Whitley states that the Beaumaris Zoo's last thylacine died several years before the zoo closed in 1937. This is incorrect, as the last thylacine displayed at the zoo died on the 7th September 1936.

Do other contradictions exist in Whitley's account? Whitley notes the existence of a movie film taken in 1933: "Fortunately there is in the Commonwealth Archives a movie film, taken about 1933, of the thylacine in Hobart Zoo, and one notes the springy, loping gait of this hunting animal". Whitley's use of the word "springy" when describing the movements of the thylacine shown in the film aptly describes the interaction of thylacine and dog as seen in film iv. The slow pacing of the thylacine in Fleay's film (v) could certainly not be described as such.

The most probable explanation to the paradox is that of writer's licence. The authors argue that it is entirely plausible that when Whitley wrote his article, some licence was employed in his description of the purchase of the postcard some 45 years earlier, and that the postcard used to illustrate the similarities between a thylacine and a dog was a later acquisition to his collection.

#### Conclusion

The authors contend that a literal interpretation of Whitley's 1928 account needs to be treated with a degree of scepticism. He may indeed have purchased a postcard on his visit to the Beaumaris Zoo, but it could not have been that bearing the image of the thylacine/dog interaction that he published in his 1973 Koolewong article.

As no thylacine present in the Hobart Zoo in 1928 survived beyond February 1930, it is impossible for a thylacine, bearing identical snare and stripe-pattern markings to that depicted on Whitley's postcard, to have also been filmed by David Fleay in 1933. The stripe-pattern evidence is so irrefutable that the surviving postcard in the Australian Museum collection must be a later addition to his collection.

We assert that films iii and iv were made post-1933, after Churchill's thylacine arrived at the Beaumaris Zoo, and that the earlier date(s) attributed to the films are incorrect. We conclude that the thylacine in films iii, iv and v is one and the same animal – the last known captive specimen.

<sup>9</sup> The Mercury, 16th January 1928, p8.

<sup>10</sup>Examiner, 1st February 1928, p6.

II Archives Office of Tasmania, Ref. NS1753/6 (c.1930), National Film and Sound Archive, Ref. 48511 (c.1932), Department of Primary Industries, Ref. 599.28 TAS (c.19--).

<sup>12</sup> National Archives of Australia Ref: A1200/L35618

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